

**Amendments to the Claims:**

1. (currently amended): A method of forming a polysilicon resistor, the method comprising:  
providing a substrate, the substrate comprising a dielectric layer;  
5 forming a polysilicon layer on the dielectric layer;  
doping the polysilicon layer with first type dopants and second type dopants;  
defining a polysilicon resistor pattern on the polysilicon layer and removing portions of  
the polysilicon layer and the dielectric layer outside the polysilicon resistor pattern down to  
the surface of the substrate, the remainder of the polysilicon layer comprising at least a high  
10 resistance region and a low resistance region; and  
forming a salicide layer on the remainder portions of the polysilicon layer within the low  
resistance region.
2. (original): The method of claim 1 wherein the first type dopants comprise N-type dopants  
15 and the second type dopants comprise P-type dopants.
3. (original): The method of claim 1 wherein a dosage of the first type dopants and a dosage  
of the second type dopants have the same order of magnitude.
- 20 4. (currently amended): The method of claim 1 further comprising forming a salicide block  
on the remainder portions of the polysilicon layer within the high resistance region.
5. (original): The method of claim 1 further comprising:  
forming an inter layer dielectric on the substrate, the inter layer dielectric comprising at  
25 least a contact hole connecting to the salicide layer; and  
forming a conductive layer on portions of the inter layer dielectric and within the contact  
hole.
6. (original): The method of claim 1 wherein the low resistance region is at the either side of

the high resistance region.

7. (original): A method of forming a high resistance region of a polysilicon resistor, the method comprising:

- 5        providing a substrate, the substrate comprising a dielectric layer;  
         forming a polysilicon layer on the dielectric layer; and  
         doping the polysilicon layer with first type dopants and second type dopants, thus  
         forming the high resistance region on portions of the polysilicon layer.

- 10      8. (original): The method of claim 7 wherein the first type dopants comprise N-type dopants  
         and the second type dopants comprise P-type dopants.

9. (original): The method of claim 7 wherein a dosage of the first type dopants and a dosage  
of the second type dopants have the same order of magnitude.

15

10. (original): The method of claim 7 further comprising forming a salicide block on the  
portions of the polysilicon layer within the high resistance region.

11. (original): The method of claim 7 further comprising forming a salicide layer on the  
20      portions of the polysilicon layer except the high resistance region, thus forming at least a low  
         resistance region of the polysilicon resistor.

12. (original): The method of claim 11 further comprising:  
         forming an inter layer dielectric on the substrate, the inter layer dielectric comprising at least a  
25      contact hole connecting to the salicide layer; and  
         forming a conductive layer on portions of the inter layer dielectric and within the contact  
         hole.

13. (original): The method of claim 11 wherein the low resistance region is at the either side

of the high resistance region.